



Patent  
Attorney's Docket No. 030662-063

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
Yoji ITO	)	Group Art Unit: 2871
Application No.: 09/671,670	)	Examiner: H. Ngo
Filed: September 28, 2000	)	Confirmation No.: 7268
For: ELLIPSOIDAL POLARIZING	)	
PLATE COMPRISING TWO	)	
OPTICALLY ANISOTROPIC	)	
LAYERS AND POLARIZING	)	
MEMBRANE	)	

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**REQUEST FOR RECONSIDERATION**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In reply to the final Office Action dated July 26, 2002, Applicant respectfully requests reconsideration in the above-captioned application.

Applicant notes with appreciation the Examiner's withdrawal of the various rejections and objections appearing in the Office Action of December 20, 2001. There are now only two remaining rejections, i.e., a rejection of claims 1 and 4-10 under 35 U.S.C. §103 as allegedly being unpatentable over the *Aminaka* patent (U.S. Patent No. 6,064,657) and a rejection of claims 2 and 3 under 35 U.S.C. §103 as allegedly being unpatentable over the *Aminaka* patent in further view of the *Kawata* patent (U.S. Patent No. 6,061,113)

and Japanese Patent Provisional Publication No. 3(1991)-87720 as incorporated in column 1 lines 46-58 of the *Kawata* patent. Applicant continues to traverse these rejections and, for sake of brevity, will limit this reply to address the Examiner's comments beginning at page 5 of the Office Action.

As correctly noted by the Examiner, the Applicant stated that the transparent substrate 33 disclosed in the *Aminaka* patent is optically negative, while claims 1 and 10 patentably define that the second optical anisotropic layer is optically positive. The Office's reply is that one skilled in the art would have known that "positive birefringence" means a positive optical anisotropy or  $\Delta n > 0$  and attaches a copy of Liquid Crystals - Applications and Uses, Ed. B. Bahadur, Vol. 1, page 152, World Scientific, Singapore, copyrighted sometime before 1999. Applicant respectfully points out that equation 4.6 that appears on page 152 of relied upon by the Examiner actually indicates opposite conclusion, positive optical isotropy indicates the material is optically negative and  $\Delta n < 0$ .

The difference in conclusion lies in the definition of positive and negative crystals. The positive crystal means an uniaxial birefringent crystal having an ordinary ray with a higher velocity than the extraordinary ray. A negative crystal is a uniaxial birefringent crystal in which the velocity of the extraordinary ray surpasses out of the ordinary ray. See, [www.Photonics.com](http://www.Photonics.com) for definitions of positive and negative crystals (copies attached).

Hence, using equation 4.6 on the page cited by the Examiner,  $\Delta n$  would have a negative value for a positive crystal and positive for a negative crystal. Applicant respectfully submits that the *Aminaka* patent actually does disclose that the second optical anisotropic layer (i.e., transparent substrate) is optically negative in the sense that  $\Delta n$  is less than zero according to the definition provided by the Examiner.

As is described in the present specification on page 2, lines 18-20, an object of the present invention is to provide an ellipsoidal polarizing plate suitable for a liquid crystal display of TN mode. Claims 1-9 define an ellipsoidal polarizing plate which can optically compensate a liquid crystal cell of TN mode, as is defined in claim 10.

On the other hand, *Aminaka* discloses only a liquid crystal display of a bend alignment mode or a homogeneous alignment mode (see Abstract and claims of *Aminaka*). *Aminaka* (except BACKGROUND OF THE INVENTION) is silent with respect to TN mode.

With respect to the second point, Applicant respectfully submits that the *Kawata* patent would not motivate one skilled in the art to use rod-like liquid crystal in place of discotic liquid crystal. The fact that they are within the same field of endeavor does not provide motivation. Further, what is actually disclosed in the *Kawata* patent at column 2, lines 19-24, which is the text relied upon by the Office, is that the viewing angle of a liquid crystal can be greatly enlarged by using a discotic liquid crystal compound in an optical compensatory sheet as opposed to using a rod-like liquid crystal compound. Given this teaching, one would not be motivated to replace the discotic liquid crystal compound with a rod-like liquid crystal compound insofar as the teaching squarely suggest the advantages

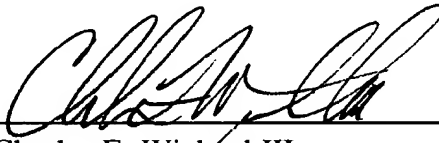
of a discotic liquid crystal compound. Hence, the *Kawata* patent does not provide motivation for replacing a discotic liquid crystal with a rod-like liquid crystal particularly because it, at best, teaches away from the direction the Applicant has gone. Regardless of whether this second argument is accepted, Applicant respectfully points out that the first argument establishes that the claim recitations are not met.

In light of the foregoing, Applicant respectfully requests reconsideration and allowance of the above-captioned application. Should any residual issues exist, the Examiner is invited to contact the undersigned at the number listed below.

Respectfully submitted,

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